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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/789,176	02/26/2004	John C. Zarganis	020843-002710US	9911

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EXAMINER

LE, THANH TAM T

ART UNIT	PAPER NUMBER
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2839

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/13/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/789,176	Applicant(s) ZARGANIS ET AL.	
	Examiner Thanh-Tam T. Le	Art Unit 2839	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 35-47 and 55-60 is/are pending in the application.
- 4a) Of the above claim(s) 39-41, 46 and 47 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 35-38, 42-45 and 55-60 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 55-60 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 55, lines 10-11, "wherein the features on the top surface are dimensionally taller than the available space between the inside of the housing and the printed circuit board" are confusing and unclear, which's one is "available space"?

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 35-36, 38, 42-43, 45, 55 and 57-59 are rejected under 35 U.S.C. 102(e) as being anticipated by Ogawa et al. (6,683,245).

Regarding claims 35, 42 and 55, Ogawa et al., figure 3 shows an electronic device comprising:

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- a printed circuit board (11) comprising an electronic component (6) and a grounding portion (14a);
- an electromagnetic interference (EMI) shield (18a) comprising a top surface (A, a FIGURE A below) that including one or more features (B, the FIGURE A below), a plurality of sidewalls (C, the FIGURE A below) that extend from the top surface, and a flange (D, the FIGURE A below) extend in a direction substantially parallel to a surface of the printed circuit board; and
- a housing (10a) of the electronic device configured to enclose the printed circuit board and the EMI shield;

wherein the features on the top surface interact with an inner surface of the housing so as to compress the flange against the grounding portion on the printed circuit board.

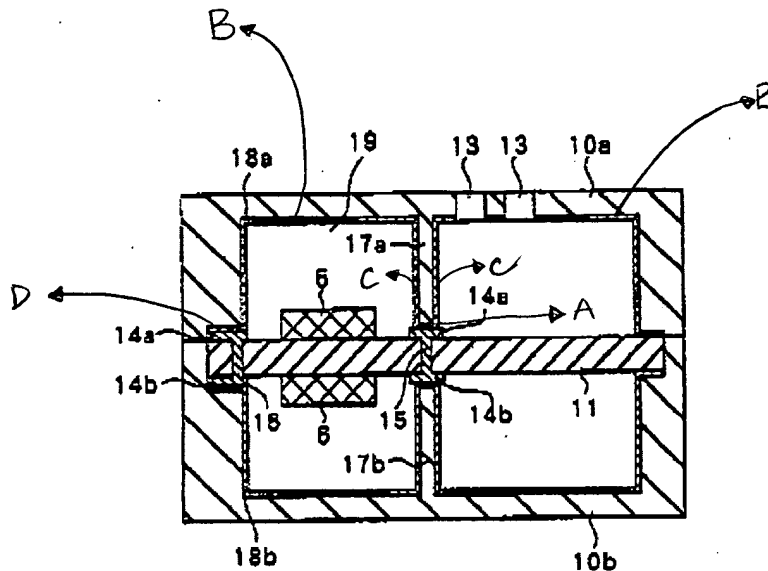
Regarding claims 36 and 43, the EMI comprising a metallized, shaped polymer substrate.

Regarding claim 57, the features are positioned to apply a force downward along the plurality of sidewalls.

Regarding claims 38, 45 and 58, the features are positioned adjacent and above the sidewalls.

Regarding claim 59, the features are spaced over the entire top surface.

FIGURE A



Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 37, 44 and 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogawa et al. (6,683,245) in view of Seidler (6,870,091).

Ogawa et al. disclose the claimed invention as described above except for the features comprising semi-circular protrusions/convex shape those extend toward the inner surface of the housing.

Seidler, figure 7 shows a shield (1) having a raised portion (5) with a semi-circular protrusion. It would have been obvious to one with ordinary skill in the art at the time the invention was made to modify Ogawa et al. to have the shield with the raised portion, as taught by Seidler, in order to have the stronger contact between the inner surface of the housing and the EMI.

7. Claim 60 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ogawa et al. (6,683,245) in view of King et al. (5,761,053).

Ogawa discloses the claimed invention as described above except for an adhesive applied between the flange and the grounding portion of the PCB.

King et al., figure 1 shows a faraday cage (10) having a conductive adhesive (20) is located between a conductive housing (11) and a ground ring (31) of a PWB (30). It would have been obvious to one with ordinary skill in the art at the time the invention was made to provide Ogawa to have the adhesive, as taught by King et al., in order to shield electromagnetic and radio frequency interference (King et al.'s abstract).

Response to Arguments

8. Applicant's arguments filed 1/26/07 have been fully considered but they are not persuasive.

Regarding claims 35 and 42, Applicant argues Ogawa does not teach "an electromagnetic interference (EMI) shield comprising a top surface that includes one or more features" and "wherein the features on the top surface interact with an inner

surface of the housing so as to compress the flange of the EMI shield against the grounding portion on the printed circuit board”.

The FIGURE A above as noted by the Examiner that disclosed the limitations above.

Regarding claims 37 and 44, since Ogawa discloses the features, but that features are not semi-circular protrusions. Seidler, with a raised portion (5) has a semi-circular. Seidler is used to combine with Ogawa because of the shape only; therefore, the combination of Ogawa and Seidler is properly.

For the above reasons, it is believed that the rejections should be sustained.

Conclusion

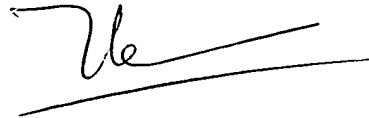
9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

10. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh-Tam T. Le whose telephone number is 571-272-2094. The examiner can normally be reached on 7:30-5:00.

12. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Thanh-Tam T. Le
Primary Examiner
Art Unit 2839

TL.
02/08/07.